

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JST

Well ID: MW-19 Depth (ft.): 498  
Sampling Zone No.: 5  
Starting Time: 1015 Finishing Time: 1057

Date: 1/15/02

Water Pressure Inside MP Casing -

Beginning of Session: 79.28  
End of Session: 77.25

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	79.28	✓	93.87	✓	93.87	✓	✓	79.28	1042	8.48	802	16.9	0.880
2	✓	✓	✓	✓	✓	✓	77.24	✓	93.89	✓	93.90	✓	✓	77.25					
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Notes: NO COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-19 Depth (ft.): 444  
Sampling Zone No.: 4  
Starting Time: 1116 Finishing Time: 1146

Date: 1/15/02

Water Pressure Inside MP Casing - Beginning of Session: 55.66  
End of Session: 53.64

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	55.66	✓	72.24	✓	72.27	✓	✓	55.65	1133	9.04	0	17.1	0.451
2	✓	✓	✓	✓	✓	✓	53.63	✓	72.26	✓	72.28	✓	✓	53.64					
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Notes: WATER IS CLEAR, NO ODOR.

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-19 Depth (ft.): 392  
Sampling Zone No.: 3  
Starting Time: 1206 Finishing Time: 1338

Date: 1/15/02

Water Pressure Inside MP Casing -

Beginning of Session: 32.93  
End of Session: 31.34

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	32.93	✓	98.39	✓	98.39	✓	✓	32.94	1237	8.72	163	17.8	0.960
2	✓	✓	✓	✓	✓	✓	32.89	✓	98.37	✓	98.39	✓	✓	32.89					
3	✓	✓	✓	✓	✓	✓	32.85	✓	98.39	✓	98.38	✓	✓	32.89					
4	✓	✓	✓	✓	✓	✓	31.33	✓	98.39	✓	98.39	✓	✓	31.34					
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 5.25L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MPS/JNT

Well ID: MW-19 Depth (ft.): 314  
Sampling Zone No.: 2  
Starting Time: 1349 Finishing Time: 1419

Date: 1/15/02

Water Pressure Inside MP Casing -

Beginning of Session: 14.14  
End of Session: 14.17

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.14	✓	66.40	✓	66.40	✓	✓	14.14	1419	8.30	164	15.9	0.733
2	✓	✓	✓	✓	✓	✓	14.16	✓	66.39	✓	66.39	✓	✓	14.17					
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-19 Depth (ft.): 242  
Sampling Zone No.: 1  
Starting Time: 1512 Finishing Time: 1539

Date: 1/15/02

Water Pressure Inside MP Casing -

Beginning of Session: 14.13  
End of Session: 14.18

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.13	✓	38.38	✓	38.38	✓	✓	14.18	1539	9.02	161	16.6	0.391
2	✓	✓	✓	✓	✓	✓	14.13	✓	38.40	✓	38.40	✓	✓	14.18					
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Notes: WATER HAS A YELLOW TINT/NO ODR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MPS/JNT

Well ID: MW-20 Depth (ft.): 900  
Sampling Zone No.: 5  
Starting Time: 0930 Finishing Time: 1026

Date: 1/16/02

Water Pressure Inside MP Casing -

Beginning of Session: 308.45  
End of Session: 306.39

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	308.45	✓	310.41	✓	310.41	✓	✓	308.46	10 <sup>10</sup>	10.60	232	15.9	0.403
2	✓	✓	✓	✓	✓	✓	306.40	✓	310.44	✓	310.44	✓	✓	306.39					
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MBS/JNT

Well ID: MW-20 Depth (ft.): 700  
Sampling Zone No.: 4  
Starting Time: 1053 Finishing Time: 1131

Date: 1/16/02

Water Pressure Inside MP Casing -

Beginning of Session: 212.37  
End of Session: 219.28

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	221.35	✓	212.37	✓	212.30	✓	✓	221.39	1131	10.54 <del>10.60</del> JNT	101	15.9	.472
2	✓	✓	✓	✓	✓	✓	219.33	✓	212.37	✓	212.37	✓	✓	219.28					
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12																			

Notes: NO NOTICABLE COLOR OR OVR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MPS/JNT

Well ID: MW-20 Depth (ft.): 562  
Sampling Zone No.: 3  
Starting Time: 1146 Finishing Time: 1225

Date: 1/16/02

Water Pressure Inside MP Casing -

Beginning of Session: 161.21  
End of Session: 159.19

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	161.21	✓	160.99	✓	161.00	✓	✓	161.20	1225	9.20	-10	17.0	0.632
2	✓	✓	✓	✓	✓	✓	159.17	✓	161.03	✓	161.04	✓	✓	159.19					
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Notes: NO COLOR OR ODOR

Total Volume: 2.0L



**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HWO19  
Personnel: MES/JST

Well ID: MW-20 Depth (ft.): 392  
Sampling Zone No.: 2  
Starting Time: 1242 Finishing Time: 1501

Date: 1/16/02

Water Pressure Inside MP Casing -

Beginning of Session: 87.10  
End of Session: 85.15

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	87.10	✓	91.66	✓	91.75	✓	✓	87.14	1450	9.60	84	17.2	0.327
2	✓	✓	✓	✓	✓	✓	85.14	✓	91.76	✓	91.76	✓	✓	85.15					
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Notes: WATER CLEAR - NO ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JMT

Well ID: MW-20 Depth (ft.): 230  
Sampling Zone No.: 1  
Starting Time: 1518 Finishing Time: 1600

Date: 1/16/02

Water Pressure Inside MP Casing -

Beginning of Session: 16.39  
End of Session: 15.39

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed	Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)	Conductivity (mmhos)
1	✓	✓	✓	✓	✓	✓	16.39	✓	21.39	✓	21.41	✓	✓	16.39	1545	9.12	<del>10</del>	16.9	0.85
2	✓	✓	✓	✓	✓	✓	15.34	✓	21.37	✓	21.39	✓	✓	15.39					
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10																			
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.5L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MRS/JST

Well ID: MW-14 Depth (ft.): 540  
Sampling Zone No.: 5  
Starting Time: 1000 Finishing Time: 1050

Date: 1/8/02

Water Pressure Inside MP Casing - Beginning of Session: 142.38  
End of Session: 140.32

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	142.38	✓	168.61	✓	168.61	✓	✓	142.39	1038	9.04	27	17.3	0.256
2	✓	✓	✓	✓	✓	✓	140.30	✓	168.60	✓	168.60	✓	✓	140.32					
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9																			
10																			
11																			
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Notes: WATER IS CLEAR - NO ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-14 Depth (ft.): 456  
Sampling Zone No.: 4  
Starting Time: 1102 Finishing Time: 1132

Date: 1/10/02

Water Pressure Inside MP Casing -

Beginning of Session: 105.68  
End of Session: 103.64

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	105.68	✓	132.12	✓	132.12	✓	✓	105.67	1123	8.78	0	18.6	0.512
2	✓	✓	✓	✓	✓	✓	103.62	✓	132.12	✓	132.13	✓	✓	103.64					
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5																			
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10																			
11																			
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Notes: WATER IS CLEAR - NO ODOOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-14 Depth (ft.): 382  
Sampling Zone No.: 3  
Starting Time: 1144 Finishing Time: 1217

Date: 1/18/02

Water Pressure Inside MP Casing -

Beginning of Session: 73.75  
End of Session: 71.31

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	73.35	✓	99.99	✓	100.00	✓	✓	73.37	1212	8.87	28	18.5	1.01
2	✓	✓	✓	✓	✓	✓	71.33	✓	99.98	✓	100.00	✓	✓	71.31					
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Notes: NO COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HWO19  
Personnel: MES/JNT

Well ID: MW-14 Depth (ft.): 277  
Sampling Zone No.: 2  
Starting Time: 1227 Finishing Time: 1254

Date: 1/18/02

Water Pressure Inside MP Casing -

Beginning of Session: 27.49  
End of Session: 25.43

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	27.49	✓	54.08	✓	54.09	✓	✓	27.49	1246	8.67	34	18.7	1.16
2	✓	✓	✓	✓	✓	✓	25.40	✓	54.09	✓	54.09	✓	✓	25.43					
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: DN-14 Depth (ft.): 207  
Sampling Zone No.: 1  
Starting Time: 13 Finishing Time: 1350

Date: 1/18/02

Water Pressure Inside MP Casing - Beginning of Session: 14.15  
End of Session: 14.20

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.15	✓	23.54	✓	23.54	✓	✓	14.21	1336	8.14	1	19.9	1.28
2	✓	✓	✓	✓	✓	✓	14.15	✓	23.52	✓	23.53	✓	✓	14.21					
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10																			
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Notes: WATER IS CLEAR - NO ODOR

Total Volume: 2.5L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-12 Depth (ft.): 140  
Sampling Zone No.: 1  
Starting Time: 1457 Finishing Time: 1551

Date: 1/22/02

Water Pressure Inside MP Casing -

Beginning of Session: 14.10  
End of Session: 14.12

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.10	✓	20.32	✓	20.35	✓	✓	14.11		9.04	0	16.5	0.330
2	✓	✓	✓	✓	✓	✓	14.06	✓	20.33	✓	20.35	✓	✓	14.12					
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10																			
11																			
12																			

Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.0L



**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-12 Depth (ft.): 243  
Sampling Zone No.: 2  
Starting Time: 1345 Finishing Time: 1445

Date: 1/22/02

Water Pressure Inside MP Casing -

Beginning of Session: 14.14  
End of Session: 14.20

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.14	✓	63.65	✓	63.35	✓	✓	14.15	1440	9.13	0	17.5	0.395
2	✓	✓	✓	✓	✓	✓	14.10	✓	63.35	✓	63.36	✓	✓	14.16					
3	✓	✓	✓	✓	✓	✓	14.12	✓	63.36	✓	63.35	✓	✓	14.20					
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12																			

Notes: No NOTICABLE COLOR OR ODOR

Total Volume: 4.04

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-12 Depth (ft.): 323  
Sampling Zone No.: 3  
Starting Time: 1257 Finishing Time: 1334

Date: 1/22/02

Water Pressure Inside MP Casing -

Beginning of Session: 39.64  
End of Session: 37.59

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	39.64	✓	98.15	✓	98.16	✓	✓	39.63					
2	✓	✓	✓	✓	✓	✓	37.58	✓	98.13	✓	98.14	✓	✓	37.59					
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12																			

Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: nes/jwt

Well ID: MW-12 Depth (ft.): 436  
Sampling Zone No.: 4  
Starting Time: 1154 Finishing Time: 1245

Date: 1/22/02

Water Pressure Inside MP Casing -

Beginning of Session: 88.98  
End of Session: 86.95

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	88.98	✓	147.33	✓	147.20	✓	✓	89.00	1220	9.06	-10	18.4	0.387
2	✓	✓	✓	✓	✓	✓	86.95	✓	147.30	✓	147.28	✓	✓	86.95					
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Notes: No NOTICABLE COLOR OR ODOUR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JWT

Well ID: MW-12 Depth (ft.): 548  
Sampling Zone No.: 5  
Starting Time: 1030 Finishing Time: 1138

Date: 1/22/02

Water Pressure Inside MP Casing -

Beginning of Session: 135.36  
End of Session: \_\_\_\_\_

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	135.36	✓	192.96	✓	189.80	✓	✓	137.31	1126	8.75	-10	17.7	0.338
2	✓	✓	✓	✓	✓	✓	137.80	✓	192.94	✓	192.94	✓	✓	137.81	1145	9.02	3	18.4	0.354
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 3.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: NCS/JST

Well ID: MW-23 Depth (ft.): 542  
Sampling Zone No.: 5  
Starting Time: 0930 Finishing Time: 1055

Date: 1/23/02

Water Pressure Inside MP Casing - Beginning of Session: 161.65  
End of Session: 159.52

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	161.65	✓	191.48	✓	191.46	✓	✓	161.65	1050	10.69	28	17.2	0.387
2	✓	✓	✓	✓	✓	✓	159.53	✓	191.49	✓	191.29	✓	✓	159.52					
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HWO19  
Personnel: MES/JTC

Well ID: MW-23 Depth (ft.): 445  
Sampling Zone No.: 4  
Starting Time: 1115 Finishing Time: 1207

Date: 1/23/02

Water Pressure Inside MP Casing -

Beginning of Session: 119.32  
End of Session: 117.24

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	119.32	✓	149.76	✓	149.76	✓	✓	119.34	1205	9.27	28	15.8	0.335
2	✓	✓	✓	✓	✓	✓	117.23	✓	149.76	✓	149.75	✓	✓	117.24					
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Notes: No NOTICABLE COLOR OR ODOR

Total Volume: 2.0L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-23 Depth (ft.): 319  
Sampling Zone No.: 3  
Starting Time: 1222 Finishing Time: 1330

Date: 1/23/02

Water Pressure Inside MP Casing -

Beginning of Session: 64.38  
End of Session: \_\_\_\_\_

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks							Water Quality Parameters					
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	64.38	✓	96.34	✓	96.35	✓	✓	64.36	1252	8.92	28	15.9	0.389
2	✓	✓	✓	✓	✓	✓	64.34	✓	96.35	✓	96.35	✓	✓	64.34					
3	✓	✓	✓	✓	✓	✓	62.77	✓	96.35	✓	96.36	✓	✓	62.80					
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 3.75L

**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-23 Depth (ft.): 254  
Sampling Zone No.: 2  
Starting Time: 1345 Finishing Time: 1415

Date: 1/23/02

Water Pressure Inside MP Casing -

Beginning of Session: 35.94  
End of Session: 33.88

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	35.94	✓	67.88	✓	67.87	✓	✓	35.92	1410	8.57	Ø	16.2	1.02
2	✓	✓	✓	✓	✓	✓	33.89	✓	67.88	✓	67.88	✓	✓	33.88					
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Notes: NO NOTICABLE COLOR OR ODOR.

Total Volume: 2.0L



**Groundwater Sampling**  
Field Data Sheet for Multi-Port Well

Project Name: JPL Pasadena  
Project No: 00HW019  
Personnel: MES/JNT

Well ID: MW-23 Depth (ft.): 174  
Sampling Zone No.: 1  
Starting Time: 1430 Finishing Time: 1506

Date: 1/23/02

Water Pressure Inside MP Casing -

Beginning of Session: 14.20  
End of Session: 14.24

Run No.	Surface Function Checks					Position Sampler	Sample Collection Checks								Water Quality Parameters				
	Shoe Out	Vacuum Check Valve Closed	Valve Open	Evacuate Container	Valve Closed		Deactivate Set Arm Locate Port	Pressure in MP	Shoe out	Zone Pressure	Open Valve	Zone Pressure	Close Valve	Shoe In	Pressure in MP	Time	pH	Turbidity (NTU)	Temperature (°C)
1	✓	✓	✓	✓	✓	✓	14.20	✓	32.15	✓	32.15	✓	✓	14.22 →	1505	8.59	27	15.8	1.21
2	✓	✓	✓	✓	✓	✓	14.19	✓	32.13	✓	32.14	✓	✓	14.24					
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Notes: NO NOTICABLE COLOR OR ODOR

Total Volume: 2.25L